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ABSTRACT

This workshop, designed to use motivational theories in understanding work behaviors and to increase job satisfaction and performance, deals with cognitive theories in motivation, need theories, and the Equity Theory within the Expectancy Valence Model. Counseling technique areas of communication skills and rational thinking that facilitate the use of cognitive models are discussed. The second section deals with the behavioral methods of motivating employees. Behavioral technology is introduced to provide managers with a system of applying behavioral modification principles within organizational settings. Pre-test/post-test results for workshop participants who have used these materials are noted. (Author/JAC)

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# THE APPLICATION OF MOTIVATIONAL THEORIES TO BUSINESS AND INDUSTRY

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Abstract

The workshop was designed to use motivational theories in understanding work behaviors, to increase job satisfaction and performance. It was presented as a course requirement within the Industrial/Organizational concentration of the Doctoral program in Educational Psychology at Misisssippi State University. The first part of section one dealt with cognitive theories in motivation, incorporating need theories and the Equity Theory within the Expectancy Valence model. The second half of section one included the counseling techniques areas of communication skills and rational thinking to facilitate the use of cognitive models.

The second section of the workshop dealt with the behavioral methods of motivating employees. It included an introduction to Behavioral Technology to familiarize persons with behavioral principles. The second half of section two provides managers with a system of applying Behavior Modification principles within organizational settings.

Pre-test/post-test results were estimated separately for each section as all 14 participants did not attend both sections. The mean score on the pre-test fc Section I was 7.5 with a post-test mean of 8.25. The mean result for the pre-test on Section II was 1.8 with a post-test mean of 4.35. The variance in results of the two tests expressed a difference in the nature and complexity of the true/false test and the short answer test questions.

# *COGNITIVE THEORIES OF MOTIVATION

*This section of the workshop is adapted from: R. H. Steers and L. W. Porter, Motivation and Work Behavior.

## COGNITIVE THEORIES OF MOTIVATION

### Role of Motivation in Work as Expressed by Need Theories

The study of motivation, as a process that energizes, sustains, and directs behavior, is vital to understanding work behaviors, increasing performance, and maintaining job satisfaction in order to meet organizational goals as well as those of the individual worker. In the past, the traditional model of management "motivated" by use of restrictions and punishment, assuming that work is inherently distasteful and unfulfilling. Workers were viewed as unmotivated or motivated only by pay. The managers' task was to closely supervise and control subordinates in order to enforce rules. As times changed, the Human Relations model emphasized the worker's need for feeling useful at his work with emphasis on social needs. Management also began to allow subordinates to make minor decisions about their work. In the Human Resource model, work becomes a means of obtaining goals, and the worker a complex individual with varied needs that could be met at work. The managers' role becomes one of tapping into the unused reservoir of human potential by motivating employees. (See Appendix A)

Many situations, incentives, or goals can act as motivators. Motives are often difficult to determine from behavior as a single behavior may express more than one motive. Likewise, several different actions from varied persons may express the same motive. Motives can also be disguised and affected by cultural and social differences.

What motivates? According to need theories, individuals strive to meet needs to resolve an unsatisfying situation whether physiological or psychological. To summarize needs:

(1) Needs or motives channel energy in specific directions.

(2) Needs differ greatly in their strength from individual to individual though there is a universality of needs.

(3) Motives or needs may be active at one time and lay dormant at others, waiting for situations to trigger or activate them.

(4) Needs are not seen but inferred from behavior.

Alderfer, as Maslow, places needs in the following hierarchy:

(1) Existence needs (needs such as physiological or safety).

(2) Relatedness needs (social and interpresonal relationships)

and finally,

(3) Growth needs (including self-esteem and self-actualization).

As lower level needs are satisfied, the individual strives to meet higher order needs. Alderfer adds that a frustration-progression factor exists. If higher order needs can't be met, then the individual will focus primarily again on lower order needs. He also feels as Murray does, that more than one need can be acting as a motivator at one time.

In Murray's Manifest Needs Theory, needs are viewed as the force which affects our perceptions and attitudes, and directs our behavior. He includes many needs and adds that these divergent needs may often be in conflict with each other (See Appendix B). An employee who is given a promotion (symbolic of achievement needs) may be moved to a new work setting and lose contact with friends (symbolic of affiliation needs). Implications for management are to create a climate where higher order needs can also be met and to reduce conflict of needs.

Actual strategies would include:

(1) Helping employees increase their awareness of the needs they

strive towards, possibly altering their need structure.

(2) Making employees aware of job characteristics that aid in meeting needs.

(3) Altering job description to allow for meeting needs.

Equity Theory

A second theory that will be helpful to management in perceiving what motivates employees is the Equity Theory.

In the Equity Theory, motivation is affected by the individuals perception of being treated fairly in comparison to others. Equity is defined as justice, inequity - injustice. Inequity exists for an individual when he or she perceives an imbalance in the ratio between outcomes (reward for work) and inputs (efforts at work) as compared to other workers outcomes and inputs.

An important issue of the equity theory is the emphasis on the individuals perception of what exists, though it may not be real. Secondly, the perception of inequity is based on comparing the individuals ratio with the comparison other's ratio. (Example: Though an employee in another state receives $4,000 more for the same job, no inequity is experienced, but a fellow employee for your company with the same job responsibilities and abilities has received a pay raise and you experience inequity.)

The result of inequity is tension, based on the degree experienced. If the individual experiences a deficit, anger results. If he perceives he is receiving more for less input than others, feelings of guilt develop. Individuals attempt to reduce this tension by:

(1) Reducing or increasing input while minimizing the cost to themselves.

(2) Altering the outcome to maximize - which they are less apt to do if receiving more than expected.

(3) Changing the perceptions of their input or outcome by re-evaluation. Cognitive change is resisted if re-evaluation affects feelings of self-esteem.

(4) Leaving the employment situation (escape) - this is used only when other means are blocked.

(5) Altering the perceptions of comparison "others" input and outcome ratio.

(6) Changing the person to which comparison ratio is made.

Management can aid individuals in maintaining their motivation by establishing equity where inequity exists. Helping employees with perception, altering inputs and outcomes accordingly as well as changing the comparison other, may be best controlled by management.

The Expectancy-Valence Model Incorporated the Previous Models

The Expectancy-Valence Theory of Motivation assumes that behavior is determined by individual and environmental components. Individuals make decisions about their behavior, they are not passively manipulated by their environment. They likewise make decisions based on individual needs, desires, and goals with an awareness of how certain behaviors will lead to desired outcomes.

The three components of the model are (See Appendix C):

(1) E→P effort to performance, the belief that by exerting effort a desired performance will result. If the individual believes that even with effort they will not be able to perform, they are less likely to be motivated to try.

(2) P→O Performance to Outcome, what the outcome of performing will be. In other words, performance will lead to a specific outcome. Some are intrinsic from direct performance, others are extrinsic and are controlled by external factors such as management.

(3) Valence, each outcome of performance has a value either negative or plus that will increase or decrease motivations.

The end result of satisfaction or dissatisfaction feeds back into the system and affects future behavior. If for example a situation of inequity occurs, the valence or value of the reward or outcome may be affected. Likewise, the valence of an outcome may be directly affected by the need of the individual prior to performing.

It now becomes necessary for the manager to do the following:

(1) Note the outcomes that are valued by workers (what needs are trying to be met). This can be done through data collection, by direct questionnaires, a survey, or observation.

(2) Determine what level of performance is desired in specific and measurable terms.

(3) Set a reachable level of performance - so that workers perceive E→P.

(4) Explicitly connect the desired performance with definite outcomes that are valued by employees. Emphasis on the employees' perception of the value - not the manager's.

(5) Reduce any conflicting expectancies or outcomes that cancel each other out.

(6) Make rewards of significant strength to motivate.

(7) Check system for equity, not equality. If rewards are equal for

all, the highest performer will reduce his level to the lower performer to re-establish equity.

Ways to Increase Motivation

(1) Effective reward systems including pay and praise, based on evaluation of specific or required behaviors.

(2) Designing jobs or job-tasks which allow individuals to meet their needs, with the ability to make decisions or choices (to some degree) within one's work.

(3) Recognition of groups as important in influencing the expectancies of individuals and their importance in meeting social needs.

(4) The supervisor can create a positive atmosphere by clearly defining goals, expectancies and rewards.

(5) Measure the motivation of employees through questionnaires and interviews.

(6) Allow employees to develop their own incentive programs from the possible choices or benefits available.

## GROUP EXERCISES AND DISCUSSION

### Cognitive Theories of Motivation

1. Resolve the following situation where inequity exists:

   Employees A and B, who are friends, have worked together for several years in the same job description. Employee A has often asked employee B for help in completing her work assignments because, "You're so much more efficient than myself." When management has asked though, employee A has always readily volunteered to take on extra work, often completing it prior to her normal work tasks. Employee C currently retired and management promoted employee A to fill the position with the statement "She can do the work of two."

2. Rank order goals or needs which can be met through work activity according to the value you place on them. Note if they can be obtained within your work setting.

3. Role play, management attempting to influence the way the work peer group as part of the organizational climate, may effect the motivation of a new employee (Groups of 4 or 5).

   Roles:

   1. Manager

   2. Employee #1 - new employee enthusiastic - eager to learn

   3. Employee #2 - informal group leader, worked many years - was passed over for promotion

   4. Employee #3 - very little achievement motivation - does not want rate busters in his group, friendly with fellow workers

   5. Employee #4 - solid employee, not outspoken - will train new employee, does not socialize with other employees

# COUNSELING TECHNIQUES

# FOR THE "MOTIVATOR"-MANAGER

Organizational Climate

The manager is a major force within the organizational climate which is more clearly defined as the properties within the work environment, the constant characteristics that affect the worker. The following are 10 characteristics of organizational climate through which managers can influence motivation. (Taken from R. M. Steers and L. W. Porter, Motivation and Work Behaviors, chapter 8.)

(1) Task structure - means of accomplishing tasks are clearly and specifically defined by managers.

(2) Reward/punishment relationship - rewards are based on performance, not favors or senority.

(3) Decision centralization - extent to which employee is allowed to enter into important decision making.

(4) Achievement emphasis - increase emphasis, allowing the need to surface so good performance can meet organizational needs.

(5) Emphasis on training and development - to increase ability to perform.

(6) Security vs. risk - reduce pressure that leads to anxiety, feelings of insecurity.

(7) Openness vs. defensiveness - the degree to which communication is freely encouraged in order to learn, instead of attempts to blame or cover up mistakes.

(8) Status and moral - feeling that organizational goals are valuable and don't conflict with individual goals.

(9) Recognition and feedback - manager gives feedback to employees regularly about their performance.

(10) Organization competence and flexibility - organizational goals are met with creativity and flexibility, avoiding crisis.

The manager's own style and role greatly affects his ability to act as a motivator of employees. Within his role is the need to maintain stability and correct problems of employees, often acting as an expert, group leader, or arbitrator.

Communication

Communication skills become increasingly important for management in fulfilling these varied roles. Communication involves the following components: Sender, Encode, Message, Media, Decode, Receiver, Feedback. (See Appendix D).

In one-way communication, the final step is omitted. Downward communication from management is not responded to by upward communication from employees. Within organizations, one-way communication is faster and more orderly. Two-way communication is less frustrating for receivers, it is more accurate though slower and allows for the need to communicate upward.

When communication within an organization is infrequent, rumors become the unofficial means of relating information, and usually involve distortions and errors.

The following are distortions that may occur in transmission of messages if communication is not open. (Taken from B. M. Bass and E. C. Ryterband, Organizational psychology, chapter 5)

Condensation - messages are shortened or slightly distorted as they are relayed.

Closure - input is not complete or ambiguous, the messenger fills in the gaps regardless of reality.

Expectations - information is relayed in the direction the messenger would like to hear it with his own values and opinions expressed.

Memory bias - messenger remembers only the parts of the message that pleases the individual with whom they are communicating.

Adaption - adapting the mood of information to offset or add to previous information. Messenger converts bad information to good to balance.

Association - information that is given in association with previous cues.

Communication skills become increasingly important in preventing these distortions from occuring. Communication and listening skills that can be helpful to the manager in communicating with employees are:

(1) While another is talking, don't interrupt, listen to all of the message and don't develop your own response while listening.

(2) Act interested, remember your non-verbal communication should coincide with verbal. Remove distractions.

(3) Control your own feelings and try to respond to the feelings of others as well as to the content of their message.

(4) Don't try to talk others out of their feelings - learn to empathize with varied points of view.

(5) Note parts of interaction that you might agree with in order to respond.

(6) Stick to one subject at a time to avoid confusion.

(7) When confronting others, describe specific behaviors you wish changed, don't attack the personality.

(8) Be aware of the other's personality needs and how he/she may

best receive information.

(9) Avoid win-lose confrontations.

Non-Verbal components of communication of which to be aware are:

Eye Contact - look at the individual to indicate you are listening, but without staring, which can be intimidating.

Body Posture - position yourself at same level as the person with whom you are speaking. Body posture can express anger, fear, domination or passivity.

Facial Expression - your expression can indicate acceptance or disapproval of an individual. Make sure it does not conflict with verbal messages that you send.

Voice Tone - control the tone, volume, and rate of speech to be most effective.

Rational Thinking

A second area of counseling techniques and theory that can be useful for the manager is rational thinking. Rational thinking believes that behavior is goal-oriented and directed towards and end, even if the individual cannot clearly define his goals. Much behavior, however, is clearly directed by irrational thinking and attempting to rationalize behavior after the fact. If people act without being aware of the goals or needs that motivate them, they develop a tendency to establish value or reasoning for behavior after the fact.

Rational man can be motivated because he calculates the expected benefit of specific behavior and the cost of his performance, acting to optimize among his options. A rationalizing man is affected by motives he is not consciously aware of, and then seeks to justify his action, often

with reasons that are more socially acceptable.

Some examples of irrational thinking that may affect employees' attitudes follow: (Taken from D. Goodman and M. Maultsby, Emotional well-being through rational behavior training. Springfield, Ill.: Charles Thomas Publisher, 1978.)

(1) Inconsistency: The person sets high standards for himself or others at some times and not at others. He wants to own things but not to earn the money to buy them. He wants high grades but will not study. He wants others to like him but will not control his temper.

(2) Generalizing From a Few Particulars: The person makes general conclusions based on a few isolated facts, as in the case of deciding that all people belonging to a certain group have qualities that he has found in one or two members in that group.

(3) Exaggeration: The person describes a moderate failure as a catastrophe, or an inconvenience as a terrible problem.

(4) Shifting Responsibility: Instead of assessing responsibility for a given situation to one or more possible causes, the person arbitrarily assigns it to a person he has selected or a condition he has decided, in advance, is the cause.

(5) Viewing Feelings as Facts: The person believes that because he reacts to something or someone in a certain way that is emotional, therefore, this means that something or someone actually is the way he views them.

(6) Trying to Reconstruct Reality: The person thinks in the "as if" mode, declaring that a person or situation "should be" different than it is, simply because he wants it to be that way. Failing

to recognize the antecedents for something being the way it is.

(7) Expecting Immediate or Rapid Change: Impatience, in itself, can lead to irrational conclusions about the speed or changes in situations or other's or your own behavior. The emotional desire for change interferes with clear perception as to its feasibility and its speed.

(8) Following Established Habit Patterns: The satisfaction derived from repeating behavior interferes with clear perception as to whether the behavior is personally or socially desirable. The person reasons that because a behavior was gratifying in the past, therefore, it deserves to be repeated in the future regardless of consequences.

(9) Assuming One's Behavior is Externally Caused: This assumes a direct relationship between outside events and one's own feelings, thoughts or actions, ignoring one's own role in creating behavior.

(10) Perfectionism: The person thinks in terms of "always", "never", "have to", and "must not" with respect to his own behavior and that of others, or in regard to conditions and situations he either insists be achieved or demands be maintained. He does not recognize fallibility as an inescapable equality of human beings.

(11) Magical Thinking: The person believes that something will or might happen because he dreams, feels or thinks that it should, according to some preconceived "system" of ideas he has adopted. Astrology, superstition, witchcraft or other arbitrary ideologies are classic examples of the magical way of perceiving and interpreting the world.

(12) Mind-Reading: The person thinks he can "feel" what other people are thinking, and that they can "feel" what he is thinking. He thus imagines many reactions that may be totally at variance with reality.

By management being aware of the process of irrational and rational thinking, they can aid the employee in reconstructing thoughts that interfere with motivation and effective work behaviors. They can aid the employee in making their own decision about whether their behavior is rational.

Guidelines to determine rational behavior (as stated by Maxie Maultsby, Handbook of rational self-counseling, The Rational Behavior Training Section, Office of Continuing Education, University of Kentucky Medical Center, Lexington, Kentucky, 1971) are as follows:

(1) It is based on objective reality.

(2) It is most likely to preserve your life.

(3) It enables you to achieve your immediate and long range goals most quickly.

(4) It helps you avoid significant personal conflict.

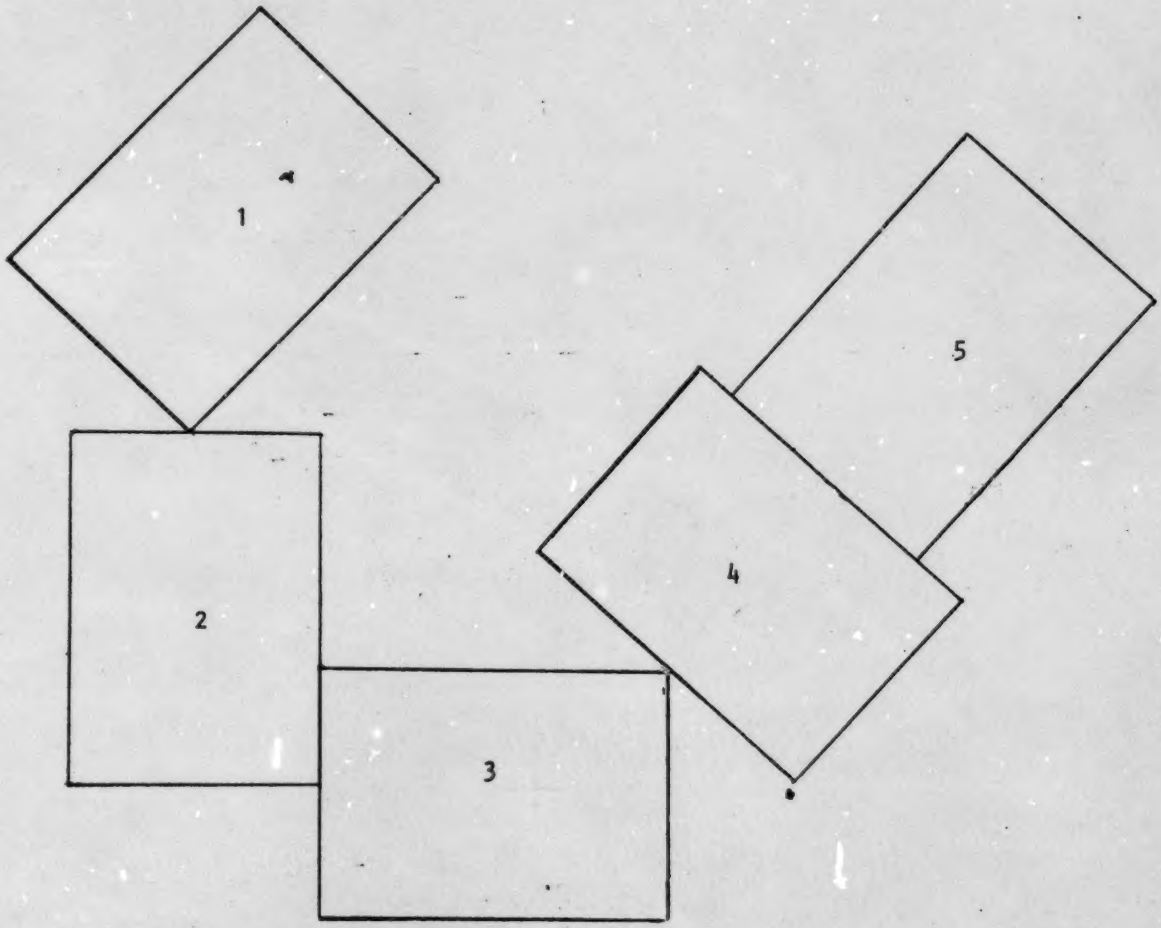
(5) It helps you to avoid significant environmental conflict.

The awareness that results, alters one's perceptions of the self and job behaviors. Expectancies, goals, performance, and effort are viewed in new terms. Motivation becomes a rational way of meeting one's goals effectively.

## GROUP EXERCISE AND DISCUSSION

### Counseling Techniques for the "Motivator"-Manager

1. Demonstrate the effectiveness of one-way versus two-way communication. Describe the design below using one-way communciation (no questions are asked by participants) and then by two-way communication (participants may communicate). Compare the two processes and results by showing the original design.




(The idea for the design is adapted from H. J. Leavitt, Managerial psychology, University of Chigaco Press, Chicago, 1958.)

2. Group role playing of manager and employees making decisions over new equipment. Use effective communication skills to perceive the other's concerns.

    1. Manager - needs to keep cost down and employees happy

    2. Employee #1 - looking to impress the manager for possible promotion

    3. Employee #2 - Supervisor, responsibility is concern for the safety of his subordinates

    4. Employee #3 - New employee - inexperienced at the job - wants more information

    5. Employee #4 - Minority employee - underlying fears of discrimination

    6. Employee #5 - Very talented - achievement oriented, sees new equipment issue only from positive gain for his work performance

3. As a group finds ways to produce rational behavior from irrational thinking.

    1. A minor error was made by a new employee who was critized openly by an immediate supervisor. Since that time the new employee began to make many mistakes.

    2. A manager gives 110%, driving himself at times to physical exhaustion. What irrational thinking may be motivating his behavior?

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# INTRODUCTION TO

# BEHAVIOR TECHNOLOGY

## What is Behavior Management

It is the task of management to make people and material resources productive. Management has become increasingly technological and sophisticated, but most of the technology and the sophistication have been in material resources and in the management of finances, products, and other things.

People work for payoff, and if the job "matters" to the individual, the individual will perform. The job of the manager is to make performance matter. Both productivity and job satisfaction can simultaneously be increased through the application of a results-oriented, empirical, data-based system of management.

Behavior management is the set of principles and procedures that provide for the practical application of laws of human behavior determined by research and applied to the work setting. It is concerned with discrete relationships between specific events and behavior. It is a response to the needs of the manager. Behavior management asks the manager what performance of his employees, or himself, he would like to see improved. (For examples, see Appendix E)

Behavior management techniques may be applied on an individual basis, but the greatest benefits to the organization are derived from a total organizational effort, fully supported by a participating chief executive. The principle that behavior is maintained by reinforcement must be applied to all the behaviors at each level of management.

In summary, behavior management is the application of sets of procedures that rely on the specification, measurement, and control of behavior through the alteration of consequences or behavior modification.

Brief History

The earliest beginnings of the behavior change movement can be traced to the late 19th century and early 20th century. In the early 1900's in the U.S., John Watson founded what came to be known as behaviorism.

Perhaps no single person has had as much influence upon behavior change applications as B. F. Skinner. The work of Joseph Wolpe and Hans Eysenck in the 1940's and 1950's was also extremely important. Wolpe brought his behavior change techniques to the U.S. in the early 1960's.

Principles

Almost everything a human being does is somehow related, either directly or indirectly to learning. A term less attractive is conditioning. Both terms mean behavior change. The two ways of learning include operant conditioning and respondent conditioning.

Operant Conditioning - Operates under the principle of reinforcement (Rx). It is defined by its effects on behavior and by the way it is presented. If an event is added to the environment contingent upon (following) a behavior and there is an increase in the subsequent rate of that behavior, positive (Rx) has occured. By definition, positive (Rx) always works. Two kinds of positive (Rx) are 1) Primary Positive (Rx) - Reinforcers that can act to produce an increase in behavior without any previous experience with the reinforcer, i.e., food, water, and 2) Conditioned Positive (Rx) - Events that have no inherent reinforcing properties; their reinforcing value must be learned, i.e., money, praise, attention.

The essential elements in both kinds of reinforcers are that the consequence added to the environment is the event that produces behavior change, and that the change can be quantified. The two most common conditioned

reinforcers are money and tokens or points. (See Appendix F)

Negative (Rx) is probably the most misunderstood concept in operant conditioning. Many people equate negative (Rx) with punishment. Negative (Rx) and punishment are not the same processes. Positive (Rx) is produced by adding something to the environment; negative (Rx) is produced by removing something from the environment. Both produce an increase in behavior. Negative (Rx) is the removal of a stimulus from the environment contingent upon the behavior that has been targeted for increase, i.e., removal of a shock after a rat depresses a lever. Two kinds of negative reinforcement situations are 1) Escape - One engages in a response in order to escape the ongoing presentation of an unpleasant stimulus. The unpleasant event must be present. 2) Avoidance - One can be taught to avoid the stimulus.

Punishment or behavior reduction is the reduction of unwanted behavior by adding or removing events from the environment. The two kinds of punishment (Px) include both positive (Px) and negative (Px). Positive (Px) is the presentation of an event contingent upon a response decreasing the future probability of that response, i.e., verbal reprimands. Negative (Px) is withdrawal contingent upon a response that results in the decrease of that response. Three types of negative (Px) include 1) Timeout from positive (Rx) - which involves either removing the individual from a reinforcing environment or removing the reinforcers from the individual, 2) Extinction - withholding the reinforcers that maintain behavior, 3) Response Cost - a reinforcer is removed contingent upon inappropriate behavior, i.e., receiving a speeding ticket.

Respondent Conditioning - Repeated pairing of a neutral stimulus with an unconditioned stimulus that produces a conditioned response, thus making

the formerly neutral stimulus a conditioned stimulus, i.e., Little Albert and the Rat.

Schedules of Reinforcement

1. Continuous (Rx)-(CRF) every correct response is (Rx). It is a most effective schedule in which to teach a new behavior and fairly easy to produce extinction of behavior.

2. Fixed Ratio - (Rx) is delivered after a predetermined number of correct responses. High rates of responding until (Rx) occurs with a pause after (Rx). (Example - piecemeal)

3. Variable Ratio - (Rx) is delivered for different numbers of correct responses, after an average number of responses. Continuous rate of responding with no pauses. (Example - slot machine)

4. Fixed Interval - (Rx) is delivered for the first correct response after a set period of time has passed. Pause after (Rx). As the predetermined interval draws close, the rate of the behavior begins to increase again (Scallop Effect). (Example - pay check)

5. Variable Interval - The delivery of (Rx) for the first correct response after varying lengths of time. Consistent rate of responding with no pause. (Example - pop tests) Behaviors maintained on both VR and VI schedules are the most resistant to extinction.

If the person is not engaged in the particular behavior you wish him or her to engage in, you may need to lead them or shape them into the behavior by (Rx) successive approximations to the desired behavior. You may also differentially (Rx) high rates of response or low rates of response.

When using (Rx), a useful method is to set up a menu of (Rx) from which the employees may choose. This may be done by having each employee list a number of things he or she enjoys.

Methods of Behavioral Assessment

1. Interview

2. Direct Observation - This is the hallmark of the behavior change approach.

3. Analogue Methods - Techniques that simulate the "real world".

4. Evaluation - That which we want to change must be measured or recorded. It is necessary to operationally define the behavior selected for change. This can be done through event recording, interval recording, or time sampling.

Research Design

In a research design there is proper evaluation of procedures to assure that the treatment or environmental manipulation was truly responsible for the change observed.

Almost all behavioral research and evaluation strategies begin with a baseline period (A). Data are gathered on the target behavior for a period of time with no treatment in effect. Baseline data are gathered until they show stability. After the baseline data are collected a treatment condition is introduced (B). A design which utilizes only one baseline and one treatment condition is called an AB design.

Reversal Design - Take the treatment out for a while, if the behavior then returns to a rate similar to what it was during baseline, you have strong evidence that it was the treatment that was responsible for the change. Reintroduce the treatment. This is called an ABAB design where you gradually fade out the treatment.

Multiple Baseline - This usually does not require any reversal condition, but it does manage to demonstrate experimental control, i.e., attempt to modify tardiness. Introduce a chart to lead to improved punctuality by

staggering the introduction of treatment over time. The treatment is not introduced in one setting until some change has occured in the other setting. For example, keep a record of the number of people returning late after a break or lunch, do not keep charts, chart contingent on entering on time after a break, etc., no chart, chart, un-patriots chart (people who return late), etc.

## EXERCISES

### Introduction to Behavior Technology

1. Fred is lazy and does half the work of other persons in the plant. Because of this laziness his supervisor chews him out after which he does even less work. For Fred the chewing out acted as an

   (a) Reward (b) Punishment

2. Think of one recent problem you have had with a subordinate and design a behavior way of dealing with that problem.

3. Optional exercise for students. Think of one recent problem you have had with either your roommate or fellow student with whom you were (or are) working on a class project, or a problem you encountered while working over the summer and develop a behavioral way of resolving that problem.

# *ORGANIZATIONAL SYSTEMS OF BEHAVIOR MANAGEMENT

*This section of the workshop is adapted from: Behavior Management: the New Science of Managing People at Work by Lawrence M. Miller; 1978, John Wiley & Sons. See especially chapter 11. Organizational Systems of Behavior Management.

We know that managers perform social reinforcement, tangible reinforcement, and data-based feedback to help increase employee performance. There are, however, many other activities that managers perform to influence performance. Managers spend much of their time gathering information and making decisions. Managers promote some employees and demote others.

Any event that influences behavior is either an antecedent stimulus (comes before the behavior) or a consequence. If a procedure is an antecedent, the principles of stimulus control apply. If the procedure is one that delivers consequences following behavior, the principles of (Rx), extinction, and punishment apply.

A Behaviorally Based Management Model

Management functions are often described as planning, leading, delegating, organizing, and controlling.

Five general categories of fairly unique sets of behaviors in which the manager engages to influence employee performance and job satisfaction are (See Appendix G):

1) Direction - includes all presentation of stimulus events that occur before a performance and that evoke the desired performance, i.e., formulating and communicating company policies, job descriptions, performance objectives, and modeling the behavior desired. The simplest way to give directions is to have an employee watch you operate a piece of equipment. It also includes making a decision on such things as length of break time and informing the employees of the rule either orally or by posted memo.

2) Performance measurement and feedback - these involve measuring the

results of the behavior of a person or a group of persons and presenting the data in a way that provides comparisons both between groups or persons and overtime. A system of data collection is necessary which records and reports the results of behavior in a continuous manner. For instance, amount of monthly sales, or number of times the employee meets or exceeds a predetermined amount and quality of production, i.e., number of stereo components made each day.

The feedback portion should channel the performance information back to the employees or groups of employees involved. For example, a chart could be erected which depicts the daily or weekly output of a group of employees or the number of rejects an employee or group has had for poor quality.

Along with the feedback, one should provide an appraisal of the performance; that is one should tell the employee whether or not he is meeting or exceeding company standards and why, i.e., Joe, your production of _____ is down and I notice here you are taking long breaks. You need to shorten your breaks and work on increasing your output.

Methods used to make the appraisal include written appraisals (freehand) or appraisal forms.

3) Managing consequences - Consequences include all stimulus events that occur following and contingent on performances. They are those activities of the manager resulting in the presentation or withdrawal of rewards or punishment. They include the determination of salary, a bonus, or promotions. These decisions may be made using written pay or bonus policies for interviews with the employee, i.e., meet and determine to what extent the employee finds the salary rewarding, or see the connection between bonuses and behavior.

Consequences may also be managed through the use of social reinforcement.

Again, interviews and questionnaires may be used to find what social (Rx) employees receive from their managers, or one could observe the interaction between the manager and the employee.

Another tool for managing consequences is the natural or intrinsic (Rx) of the job itself. One could observe the job to determine the variety/repetition factor. Another way of determining intrinsic (Rx) is to ask the employees themselves by way of interviews or questionnaires.

The final tool for correcting these are procedures which reduce undesirable behaviors. When correcting, one could give the individual clear directions as to how to improve his performance, i.e., I want you to smile when you greet a customer. One may observe the manager's correcting skills, or role play situations requiring correcting procedures.

4) Problem solving/decision making - Both the quality of the decision and the process by which it was reached will have an effect. If the person has input into a decision they will be more committed to it. The Behavioral Steps are:

1. Problem Definition - which involves determining exactly what the problem is. Joe is talking with Ed instead of running his machine
2. Data Gathering - one gathers information about the problem; the number of minutes out of each hour Joe spends talking instead of working.
3. Brainstorming - the manager(s) list all possible situations, i.e., build a wall between Joe and Ed; provide (Rx) for each hour Joe and Ed talk less than 5 minutes; fire them, etc.
4. Decision Selection - in this step one determines which potential solution seems best. This may be done by listing the positive and

negative points of each and totaling them, for example, the (Rx) solution just mentioned.

5. Commitment to the course of action - this means one must have a desire to make the solution work by carrying out the program in its entirety. All supervisors must (Rx) Joe and Ed for not talking.

6. Follow-up Feedback - the last step involves returning after the program has been in effect for some time and assessing whether or not it still works, and providing the results of the assessment to all involved. One would return after a year to see if Joe and Ed were still talking very little and check this against production.

5) Self-Management - This means the individual is able to control his own performance. The more independence the job provides the greater the degree of self-management needed. All persons engage in self-management. Many job-enrichment plans include some form of self-management. There are six (6) behavioral components of self-management.

1. Personal objective setting - this means the person is able to determine and write down what he wants to accomplish for himself and by when he wants to accomplish it; both short term and long term, i.e., writing down things to be done on a calendar.

2. Self-measurement - the manager is able to pinpoint specific behaviors which contribute to his performance. He records his behavior, i.e., number of employees he speaks to in a day, or how many of the jobs on his calendar he has accomplished.

3. Stimulus control procedures - the manager knows the effects stimuli have on his behavior and utilizes them accordingly. For example, he would not place his desk in front of a window to avoid distractions.

4. Self-reinforcement - this involves allowing oneself a reward after completing a piece of work, such as getting a cup of coffee after finishing a report.

5. Feedback - as we have already discussed, this involves careful reviewing of your own performance.

6. Management of stress or emotional responses - the manager is able to avoid feeling extremely pressed or tense during work. He devotes time to relaxation and responds to high pressure situations in a relaxed and competent manner. Finally, he should be aware of the state of his physical health.

These six components may be assessed by using interviews in which the manager is asked questions about self-management practices, and questionnaires assessing the managers and employees perception of each indicator. Some questions might be: How many units of _____ do you produce per hour? Or, what are your immediate and long range goals? One may also observe the manager and employees behavior, organization, priorities and written indicators (notes, memos, etc.) for self-management practices. Finally, one may use role-playing situations to observe objective setting, self-measurement, etc.

Management Behavior occurs at evey level of the organization. An organizational system of behavior management may include five components:

1) Behavioral definitions of management performance - which are attempts to define the behaviors in which the managers engage to affect the performance of their employees in the workplace. For example, giving a job description may be defined as explaining and communicating job functions to employees in a manner which results in performance consistent with the functions of the job. In other words, the manager will explain the job to the worker so that he is

then able to successfully perform the job tasks. After explaining, the manager may check himself by allowing the employee to attempt to do the task or a portion of the tasks involved in the job.

2) Positive indicators of the performance - which further attempt to define managerial behavior, behavior of the employee, and the results that will be present if the management function is being performed well. It can be used in an objective setting. A positive indicator that the job is adequately explained, which we just mentioned, would be written job descriptions for both managers and employees.

3) Evaluation/analysis procedures - for determining the occurence or non-occurence of the management performance which in a sense is "auditing" management. Its purpose is to identify the resulting levels of performance and satisfaction, and to define priorities and procedures for improving management behavior. For instance, one may either give written examinations after the job descriptions or determine the percent of employees who have written job descriptions.

4) Training services - designed to influence the performance of the management functions, i.e., development of management skills. With our example, this could involve having a consultant help managers develop job descriptions; written materials on job definition; or training programs to teach managers how to explain jobs to employees.

5) Procedures of reinforcement - to maintain and increase the frequency of the desired performance. The purpose of feedback systems of any type is to provide managment with an "early warning" of the need for change. In our example, the feedback would be the employees knowledge of the job or the accuracy with which he defines the job. Reinforcement for the manager can be made contingent

upon the employees knowledge of the job tasks and functions.

The management productivity analysis should provide the management of the organization with an identification of areas of management performance that if altered will result in increased or improved output and specific economic benefits.

EXERCISES

Organizitional Systems of Behavior Management

Improving Sales and Forecast Accuracy in a

Nationwide Sales Organization

Background Conditions

The company is a chemical firm with a sales organization of 17 salesmen and five district managers. Objectives are set on a yearly basis and include specific volume goals by product for each salesman as well as goals for new business activity and personal development. Feedback is received monthly on dollar and quantity purchases by product for each salesman. The company has a yearly sales bonus plan, and this bonus is determined at the end of the calendar year by examining the objectives set by each salesman and his achievement against those objectives. Bonuses are awarded on a calendar year basis; however, checks for the year's performance are not actually received until March of the following year. A delay of up to 15 months can occur between the establishment of an objective and the delivery of a bonus.

This firm faces a problem in the evaluation and reinforcement of salesmen because there is quite a difference in markets between different sales territories, and this removes any possibility of establishing uniform goals or objectives as a basis of evaluation.

There is no method for providing feedback to the salesmen or division sales managers on the accuracy of their forecasts of expected orders during the following month(s).

Procedure

Using the "Organizational Systems Outline", adopt a program to increase

the frequency of negotiated objective-setting, evaluation of performance, feedback, and delivery of reinforcement which would directly represent annual bonus earnings. Be sure to put in checks to determine how well the salesmen understand the system as well as a program to explain the system to them. (Adapted from Miller, 1978)

Procedure Answer

A monthly point system could be used to increase the freqency of negotiated objective setting, evaluation of performance, feedback, and delivery of the (Rx) which would directly represent annual bonus earnings.

The following five categories of point could be established: (1) sales volume, (2) new business, (3) forecast accuracy, (4) reporting, and (5) other. The percent of the total possible points earned at the end of the year could represent the percent of total available bonus earned.

An objective worksheet could be devised to record the monthly objectives and earnings of each salesman. District managers and the salesmen could meet and negotiate the specific objectives for each product and the point values to be assigned to each objective. Points could be allocated according to the difficulty and priority of objectives.

A number of considerations could be taken into account by the district managers in their negotiations of objectives and point values with the salesmen.

Volume: This is the end product of a salesman's efforts.

New Business: Number of new customers.

Forecast Accuracy: Could be computed as a percent error.

Reporting Responsibilities: When and how often he reports in.

Other: Can be included to provide the manager and salesman with points

to be awarded for activities that might be specific to given salesmen.

The salesmen could be brought together at the annual meeting and a member of management could explain the program in its entirety and how it works. Each sales person should be given a brochure which explains the program. At the end of the program a test could be administered to determine how well the program was understood and further explanation could be provided to those persons who did not correctly answer 80% or more of the questions.

References

Miller, L. M. Behavior Management: The New Science of Managing People at Work. New York: John Wiley & Sons, 1978.

APPENDIX A

MANAGERIAL MODELS

CONCEPTUALIZATION OF WORK

| | TRADITIONAL | HUMAN RELATIONS | HUMAN RESOURCES |
|---|---|---|---|
| WORK | INHERENTLY DISTASTEFUL | WORK TO BE USEFUL | CAN BE CREATIVE FULFILLING STIMULATING |
| GOAL | TO MEET GOALS OF ORGANIZATION - PRODUCTION | CONCERN FOR INDIVIDUAL GOAL IF NOT CONFLICTING WITH ORGANIZATION'S | BOTH ORGANIZATIONAL AND INDIVIDUAL'S GOALS MET |
| NEEDS | SURVIVAL NEED (PHYSIOLOGICAL) | AFFILIATION MINOR SELF-ESTEEM NEEDS | CREATIVITY SELF-ACTUALIZATION ACHIEVEMENT |
| TASK | SIMPLE EASILY TAUGHT | TASK ORIENTATION | MORE COMPLEX ALLOW FOR INNOVATION |
| MOTIVATION | BY PUNISHMENT OR EXTERNAL REWARDS | INTERNALLY MOTIVATED TO DO WELL SOCIAL APPROVAL | COMBINATION OF COMPLEX INTRINSIC AND EXTRINSIC FACTORS |
| MANAGEMENT | AUTOCRATIC CONTROL | AUTOCRATIC BENEVOLENCE | DEMOCRATIC |
| DECISION MAKING | CENTRAL MANAGEMENT NO COMMUNICATION WITH SUBORDINATES | SURFACE LEVEL, MINOR DECISION MAKING OF EMPLOYEES | SELF-CONTROL & DIRECTION DISCUSSION AMONG MANAGEMENT & SUBORDINATES |
| ATTITUDE TOWARD EMPLOYEE | LITTLE CONCERN FOR EMPLOYEE | MANIPULATE TO MEET ORGANIZATION'S GOALS BUT WITH GREAT CONCERN FOR EMPLOYEE | UNTAPPED RESEVOIR OF POTENTIAL |

APPENDIX B

MURRAY'S NEEDS

Achievement
productive, ambitious, aspires to difficult tasks, willing to work towards distant goals and to attain excellence

Affiliation
warm, friendly, gregarious enjoys people and making friendships

Autonomy
free self-reliant, independent resist constraints and restrictions

Change
adaptable, innovative, flexible, likes new experiences, dislikes routine

Cognitive Structure
perfectionist, needs structure, does not like uncertainty - makes decisions based on definite knowledge

Defendence
self-protective, defensive rationalizing - resist inquiries, does not accept criticism easily

Endurance
persistent, determined, energetic, willing to work long hours

Exhibition
wants to be center of attention, engages in behavior that attracts attention

Nurturance
gives sympathy and comfort, assists others, encouraging, "helpful hand"

Order
organized, systematic, consistent, dislikes confusion - strives to develop methods of organization

Power
controlling, domineering, persuasive, enjoys leader role and seeks to influence others

Social Recognition
seeks recognition and to make a good impression, works for approval of others and to be held in high esteem

Succorance
dependent, insecure, seeks support, wants advice and reassurance from others

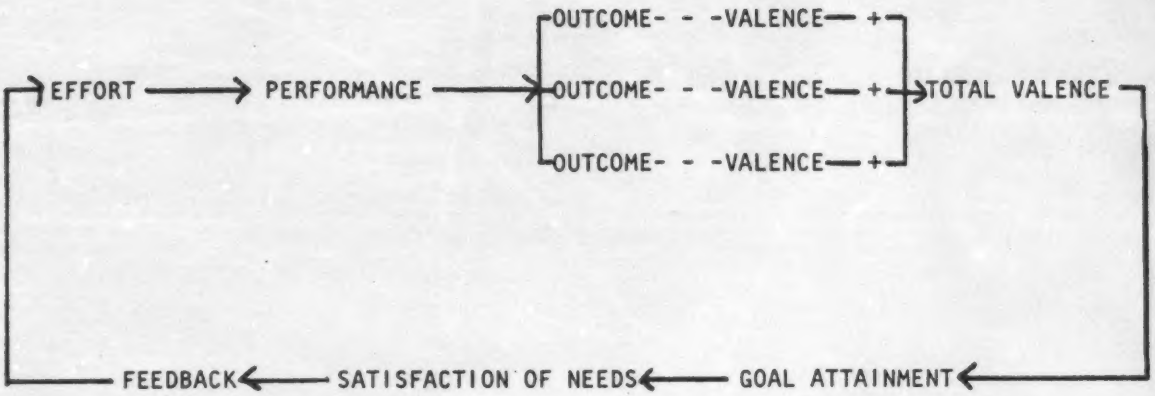
Understanding
analytical, intellectual, rational, wants to obtain knowledge

Source: Adapted from D.N. Jackson, Personality Research Form Manual. Goshen, N.Y..: Research Psychologists Press, 1967.

APPENDIX C

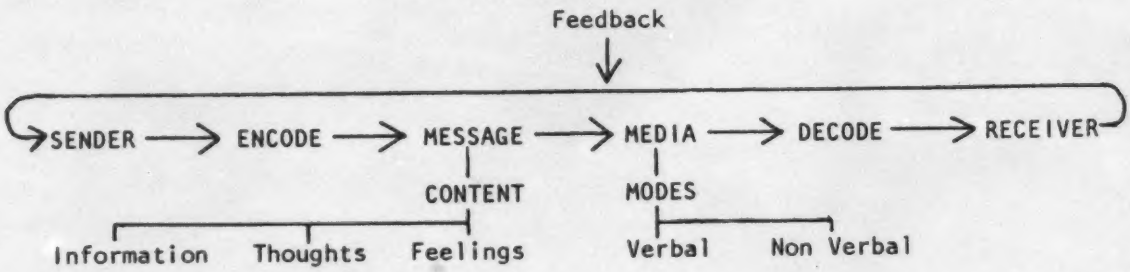
MOTIVATION

EXPECTANCY-VALENCE MODEL



APPENDIX D

Communication Flow Chart




The whole sequence of communication involves seven basic steps as illustrated. Each step is very important for proper communication, although some individuals fail to adhere to each.

SENDER - The sender refers to the individual who has an idea, thought, or message he wants to relay to another individual.

ENCODE - The sender organizes his ideas into a series of symbols, words, or pictures which he feels will communicate his ideas to the intended receivers. (Ideas to words)

MESSAGE - Refers to the ideas which he wants to communicate.

MEDIA - The method selected to relay the ideas or thoughts to the receiver. The media selected should be based on the type of message to be sent.

DECODE - This step refers to the translation of the words, pictures, or symbols back into ideas. (Words to ideas)

RECEIVER - The person to whom the idea was sent.

FEEDBACK - This step is necessary to determine if the person who received the message actually understood it.

(Adapted from K. Davis, Human behavior at work: Human relationships and organizational behavior. New York: McGraw-Hill Book Co., 1972.)

APPENDIX E

SUMMARY OF BEHAVIOR TECHNOLOGY
APPLICATIONS FOR INDUSTRY

Safety Behavior

Wearing ear protection in a high-noise-level area is a Federal requirement as stated in the Federal Register-OSHA Rules and Regulations. An employee failing to wear ear protection devices as required may be terminated.

Condition - Some employees come to work without their ear protection and some appear to lack an awareness of the need to wear ear plugs. How can you get the employees to wear their ear plugs?

Collect baseline data to determine the preprogram level of ear plug usuage.

Institute the change procedure. Explain the importance of wearing the protection devices, the possible damage to hearing from excessive noise, and the importance of following OSHA regulations. Provide incentives so that employee will start wearing their plugs; i.e., longer coffee breaks, longer lunch periods, monetary incentives, etc.

Additional incentives may be added in subsequent phases. Previous successful incentives have included lottery incentives based on poker hands, green stamps, tickets to sporting events, dinner tickets, and amusement park tickets.

"Promoting the use of personal protective equipment by behavior modification techniques," Zohar, Dav., Isreal Institute of Technology. Journal of Safety Research, 1980 (sum), Voc. 12(2), 78-85.

Used a token economy and feedback to increase the wearing of earplugs by workers by an average of 85-90%, when all previous efforts to change the

workers behavior had failed.

"A procedure to improve compliance with coal mine safety regulations" Rhoton, William, Journal of Organizational Behavior Management, 1980 (Fall), Vol. 2(4), 243-249.

Used a combination of periodic observation, contingent punitive control, praise, and graphic feedback to reduce ventilation violations in a coal mine. Violations were reduced to none over a 10 month period.

Performance

Measures that tend to increase productivity include positive reinforcement techniques, goal setting, extrinsic and intrinsic feedback, allowing time off for meeting goals, and the use of token economics or point systems.

Runnion, Johnson, and McWhorter (1978) used procedures similar to those above to reduce the length of time trucks spent at each mill while transporting goods between 58 plant locations of a textile company.

Emmert (1978) compared group feedback to individual feedback by first-line supervisors in increasing performance of four separate crews in a glass manufacturing plant.

(Both of the above cases taken from Journal of Organizational Behavior Management, 1978, 1)

"Performance contingent reward system: A field study of effects on worker productivity," Shumate, Dockstudert, Nebeker, catalog of Selected Documents in Psychology, Vo., 1981, p. 65.

Used contingent wage incentives in the form of a bonus for above standard performance. The bonus was proportional to the level of performance. Results: improved productivity in the form of improved performance rates, increased productive time, reduced overtime, eliminated backlog. This improvement occured in the first month and continued throughout the year.

Fewer individuals were needed to do an equivalent amount of work. Productivity improved to the extent absenteeism abuse had no adverse effect on output.

Interventions to improve sanitation during food preparation. Journal of Organizational Behavior Management, Beller, Eason, Phillips, and Pearson, 1980, (Sum.), Vol. 2(3), 229-240.

Used training and feedback to improve the sanitation practices of nine kitchen workers in a university cafeteria. Sanitation training lasted 30 minutes and defined the target behaviors, sensitized employees to the importance of reducing transfer of microorganisms to food. Feedback consisted of kitchen supervisor and experimenter showing employees their frequencies of microorganism collecting and handwashing behaviors during the prior work period. With feedback handwashing more than doubled the highest pretreatment level.

Tardiness and Absenteeism

A. Hermann and his colleagues offered a small bonus system for each day that an employee was on time. Recognizing the potential impracticality of large-scale daily bonus systems for punctuality, they suggested that once punctuality came under the control of a bonus system, the bonus system could be provided on a more intermittent basis. It was less expensive for the company to provide small monetary bonuses than it was for them to lose the amound of production time that they had been losing with their employees who had shown chronic tardiness.

A lottery incentive system called a "poker game" has been used to significantly reduce absenteeism in a manufacturing and distribution plant. Visual graphic feedback and social reinforcement provided by supervisory staff improved attendance by over 8% over a two-month period and saved the textile firm $9,000 annually.

(Journal of Applied Behavior Analysis, 1973, 6, 563-572 - Hermann)

Other Applications

A combination of changing antecedent stimuli and increasing feedback and reinforcement was used to improve the speed at which one female employee in a textile mill was able to complete a statistical report.

By reinforcing individuals as well as groups, social interactions between employees and satisfaction derived from the work can be formed, usually producing a reduction in both absenteeism and turnover.

Effects of self-monitoring and feedback on residential electricity consumption, Winett; Neale; and Grier, Journal of Applied Behavior Analysis, 1979, 12, #2 (Sum.), 173-184.

Some high-electricity consuming hoursehods, 170 KWH average, were taught to read their own meters (self-monitoring) while others received written feedback and others no feedback. They found the feedback group reduced consumption by 13% and the self-monitoring group reduced consumption by 7%. There was no change in the other groups.

"Improving customer service in a large department store through the use of training and feedback," Brown, Malott, Dillin, Michael, and Keeps. Journal of Organizational Behavior Management, 1980 (Fall), Vol. 2(4), 251-265.

They found feedback increased four customer-specific behaviors in three department store salespersons. Behaviors were: approaching the customer, greeting him, courteousness, and appropriately closing the sale.

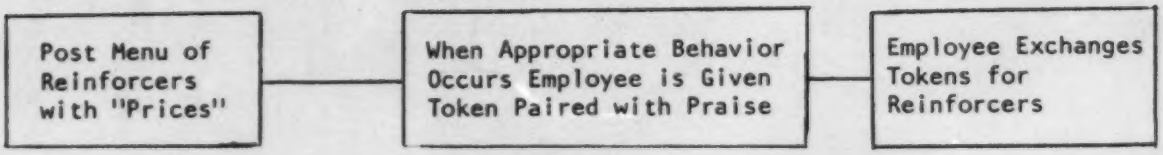
Training had only slight impact.

Fostering friendliness in a fast food franchise. Komaki, Blood, Holder, Journal of Organizational Behavior Management, 1980 (Sum.), Vol, 2(3), 151-164.

Friendliness of 11 frontline employees was measured using an interval recording system. A multiple baseline design across areas within the restaurant was used (e.g., cash register, and dining areas). Desired behaviors were defined and rehearsed, cues provided (e.g., after greeting customers). Behaviors were followed by consequences from the manager, (e.g., recognition), customers (smiles), and the empioyees themselves (check marks). The results show it is possible to train restaurant personnel in friendliness.

APPENDIX F

TOKEN ECONOMY


Post Menu of Reinforcers with "Prices"
When Appropriate Behavior Occurs Employee is Given Token Paired with Praise
Employee Exchanges Tokens for Reinforcers

## APPENDIX G

## BEHAVIOR MANAGEMENT MODEL*

| Management Behavior | Organization System Components | | | | |
|---|---|---|---|---|---|
| | 1. Behavior Definitions | 2. Positive Indicators | 3. Evaluation/ Analysis | 4. Training | 5. Reinforcement |
| 1. Direction | | | | | |
| 2. Performance measurement and feedback | | | | | |
| 3. Managing consequences | | | | | |
| 4. Problem solving/ decision making | | | | | |
| 5. Self-management | | | | | |

* adapted from Miller 1978

## APPENDIX H

### Pre-test/Post-test on Cognitive Theories

Answer True or False:

_____ 1. The main source of motivation for the worker is pay.

_____ 2. It is necessary for management to closely supervise all employees to maintain high motivation.

_____ 3. Motives are not always easily determined as they are not observable.

_____ 4. Self-actualization is not a need that can be met at work.

_____ 5. Inequity at work will not always be experienced if others receive more rewards.

_____ 6. One means of dealing with inequity is to leave the job.

_____ 7. Motivation is higher when goals are easily obtained and require little effort even though not valued.

_____ 8. Motivation to perform is higher when management makes important decisions.

_____ 9. One-way communication is faster therefore more efficient.

_____ 10. If a behavior has been rewarded in the past it probably will be in the future.

Answers for Pre-test/Post-test on Cognitive Theories

1. TRUE - there are many sources of motivation for work, pay is only one.
2. FALSE - Supervision is not always necessary to motivate most employees.
3. TRUE - motives are not observable, but seen through various behaviors.
4. FALSE - work is often a source for self-actualization.
5. TRUE - inequity is experienced if the inputs are equal and outputs are not.
6. TRUE - leaving the job is a means of resolving inequity though usually the last resort.
7. FALSE - the value of the end goal is essential in motivation.
8. FALSE - motivation is usually higher when employees invest in decision making.
9. FALSE - one-way communication may be faster but less efficient due to errors and misunderstanding.
10. FALSE - environmental circumstances will alter the rewards of a behavior as many behaviors are extinquished by removing rewards.

APPENDIX I

Pre-test/Post-test on Behavior Technology

1. What is behavior management?
2. What is a reinforcer or reward?
3. What is a punisher?
4. Give an example of a fixed internal schedule of reward; fixed ratio.
5. What is either a reversal design or a multiple baseline design?
6. Name three types of reinforcement or reward.
7. The principles of reinforcement, punishment, and extinction differ from the principles of stimulus control. When do these principles apply?
8. What are five categories of fairly unique sets of behaviors engaged in by managers?
9. What are five components of an organizational system of behavior management?
10. A. What do you expect to learn (or did you learn) from this workshop?

    B. What topics do you wish to have addressed by future workshops?

Answers to Pre-test/Post-test on Behavior Technology

1. Behavior management is a set of principles and procedures that provide for the practical application of laws of human behavior determined by research and applied to the work setting--it asks the manager what performances of his employees, or himself, he would like to see improved.

2. A reinforcer is anything which when it follows a behavior it increases the future occurance of that behavior.

3. It is anything which when it follows a behavior, decreases the future occurances of that behavior.

4. A. Paycheck
   B. Piece-work

5. A. A reversal design is one in which the treatment is removed to see if the behavior returns to baseline. If the behavior does return to baseline then you have a good indication that the treatment was responsible for the change.

   B. In a multiple baseline design the introduction of the treatment is staggered over time; the treatment is not introduced into a different setting until some change has occured in the first setting, etc.

6. Social, tangible, feedback.

7. If a behavior is under the control of it's consequences, the principles of reinforcement, punishment and extinction (operant conditioning) apply. When a behavior is under the control of an antecedent event (something which occurs prior to the behavior) the principles of stimulus control apply.

8. 1. Direction
   2. Performance
   3. Managing consequences
   4. Problem solving/decision making
   5. Self-management

9. 1. Behavioral definitions
   2. Positive indicators
   3. Evaluating/analysis procedures
   4. Training services
   5. Procedures of reinforcement

APPENDIX J

Dear Participant:

This letter of recognition hereby certifies that_____ has satisfactorily completed the workshop on the Application of Motivational Theories to Business and Industry. The workshop focused on the use of cognitive theories and behavioral principles in motivating employees. We hope that a learning experience was provided and that this experience can be applied in future "real-life" settings. We would like to thank you for participating in the workshop and for giving us the opportunity to apply the "fruits" of our education. If we can be of further assistance, do not hesitate to call upon us. Thanks again.

Sincerely,

_____,Director

_____,Director

_____,Presentor

_____,Presentor